Listing of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A method of reducing a column clock time in a liquid crystal display, comprising the steps of:

        buffering a pixel row;

        ~~determining if a~~ detecting if the buffered pixel row has all unused pixels ~~on a row~~;

        driving all ~~unused~~ pixels on ~~the~~ a corresponding imager row to black simultaneously if the buffered pixel row has all unused pixels; and

        ~~repeating the driving step on subsequent rows until a row with active video is detected.~~

        transferring the buffered pixel row to the corresponding imager row if the buffered pixel row has used pixels.

2. (currently amended) The method of claim 1, wherein the ~~unused~~ pixels on the corresponding imager row ~~or subsequent row~~ are driven to black by applying a common DC voltage to the imager row ~~or the subsequent row~~.

3. (currently amended) The method of claim 2, wherein the steps of driving all ~~unused~~ pixels on the corresponding imager row ~~or any subsequent row~~ comprises the steps of switching all pixels on the imager row ~~or any subsequent row~~ to a first voltage during the negative phase of a pixel and switching all pixels on the imager row ~~or any subsequent row~~ to a second voltage during a positive phase of the pixel ~~until a row address selector reaches the active video row~~.

4. (canceled)

5. (original) The method of claim 3, wherein the first voltage is 16 volts and the second voltage is 0 volts.

6. (original) The method of claim 1, wherein the method further comprises the step of randomly accessing a start of a plurality of rows in the liquid crystal display.

7. (canceled)

8. (canceled)

9. (canceled)

10. (canceled)

11. (canceled)

12. (canceled)

13. (currently amended) A method of reducing a column clock time in a liquid crystal display, comprising the steps of:

    randomly accessing a ~~starting~~ row in a liquid crystal display imager having a plurality of rows; ~~and~~

    storing a pixel row in a buffer, the stored pixel row corresponding to the randomly accessed row;

    detecting if the stored pixel row contains active video pixels;

    selectively addressing the randomly accessed row ~~rows in the plurality of rows having~~ if the stored pixel row contains active video pixels and avoiding addressing the randomly accessed row ~~rows in the plurality of rows having~~ if the stored pixel row contains substantially all unused pixels.

14. (currently amended) The method of claim 13, further comprises the steps of driving all pixels in an avoided row ~~on the rows having substantially all unused pixels~~ to black by switching all pixels on the ~~given~~ avoided row to a first voltage during a negative phase of the given pixel and switching all pixels on the ~~given~~ avoided row to a second voltage during a positive phase of the pixel.

15. (currently amended) A liquid crystal display imager system, comprises:

    a buffer for storing pixel rows;

a row address selector;

an imager having a plurality of rows, ~~and~~ the imager being coupled to ~~a~~ the buffer and the row address selector; and

a random access controller coupled to the buffer and the row address selector, ~~that randomly accesses a row in the imager~~ the controller detects whether pixel rows stored in the buffer contains all unused pixels, and avoids addressing corresponding rows in the imager if stored pixel rows having all unused pixels are detected.

16. (currently amended) The liquid crystal display imager system of claim 15, wherein the liquid crystal display imager system further comprises a switching mechanism that drives all ~~unused~~ pixels on a given imager row to black simultaneously if the corresponding row in the ~~imager~~ buffer has all unused pixels.

17. (currently amended) The liquid crystal display imager system of claim 16, wherein the row address selector progresses through all rows of the imager and the switching mechanism simultaneously drives all ~~unused~~ pixels on any imager row ~~having all unused pixels~~ to black ~~simultaneously~~ if the corresponding row in the buffer has all unused pixels until a row with active video is detected in the buffer.

18. (currently amended) The liquid crystal display imager system of claim 16, wherein the switching mechanism drives the ~~unused~~ pixels on the imager row to black by applying a common DC voltage to the imager row.

19. (currently amended) The liquid crystal display imager system of claim 16, wherein the switching mechanism ~~switches~~ drives all pixels on a given imager row to black by switching all pixels on the given imager row ~~having all unused pixels~~ to a first voltage during the negative phase of a pixel and switches all pixels on the given imager row ~~having all unused pixels~~ to a second voltage during a positive phase of the pixel until the row address selector reaches an active video row.

20. (currently amended) The liquid crystal display imager system of claim 16, wherein the row address selector operates at a faster speed while incrementing through <u>imager</u> rows having all pixels being driven to black and operates at a slower speed while incrementing through <u>imager</u> rows having active video.

21. (canceled)

22. (original) The liquid crystal display imager system of claim 15, wherein the system is for a liquid crystal on silicon crystal display.